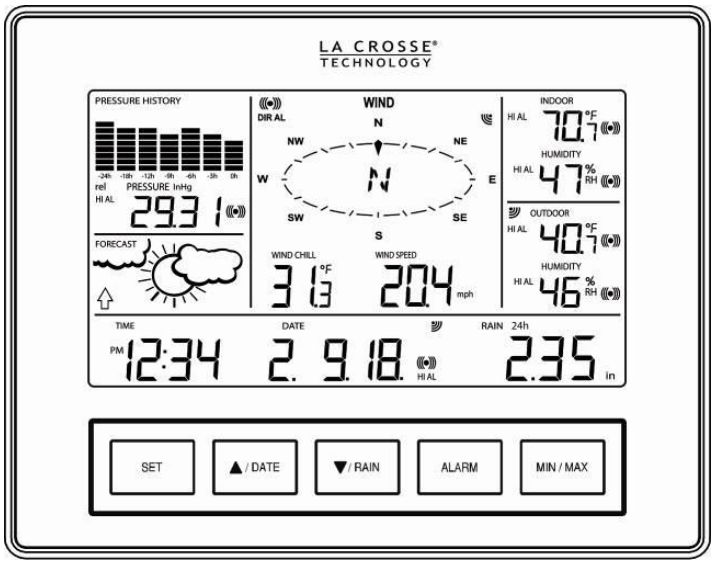
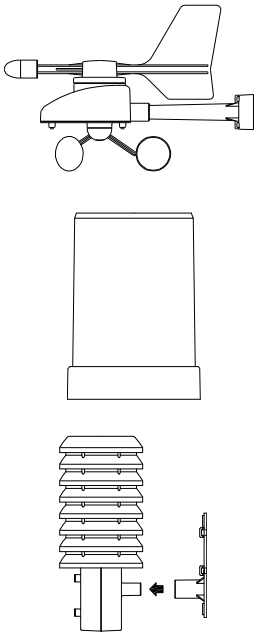
LA CROSSE®
TECHNOLOGY

Instruction Manual
DC: 100214

WS-2816U-IT Wireless Professional Weather Center

Hardware Manual





INTRODUCTION

Congratulations on purchasing this state-of-the-art weather station. Featuring time, date, weather forecast, wind gust and wind speed, indoor/outdoor temperature and humidity, air pressure and rainfall, this weather station will provide various weather information and weather forecasts.

Monitor and record a variety of data collected by the weather station including both indoor and external values sampled by the various weather station sensors.

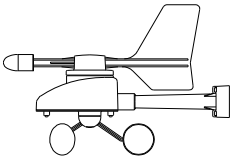
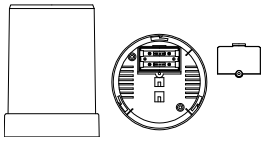
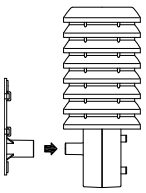
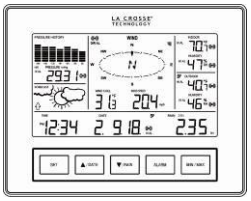
The system works as a stand-alone Weather Station or a Remote Monitoring Weather Station when using the included La Crosse Alerts Gateway.* **There is no app or software to install.**
All remote monitoring is done on www.lacrossealerts.com with an account that you create if you wish to use these added features.*

Online information at: www.lacrossetechnology.com/support

CONTENTS

INVENTORY OF CONTENTS

CAREFULLY OPEN THE PACKAGE AND LOCATE THE FOLLOWING CONTENTS:

Wireless Solar Powered Wind Sensor TX63U-IT	**Wireless Self-Emptying Rain Sensor** TX58UN-IT	**Wireless Thermo-Hygro Sensor** TX59UN-1-IT	**Wireless Weather Station** WS-2816U-IT	**La Crosse Alerts Gateway Set** (Optional)
				
1. Mast holder 2. Right angle adaptor 3. 1 x U-bolts 4. 2 Washers + 2 Nuts 5. Plastic Reset Rod 6. 100% solar-powered	1. Base sensor, funnel top cover and battery cover (pre-assembled) 2. Requires two “AA” Alkaline batteries (included)	1. Airflow cover 2. Wall mount adapter 3. Mounting screws 4. Plastic anchors for screws 5. Requires two “C” Alkaline batteries (included)	1. Foldout stand 2. Requires three “C” Alkaline batteries (included)	1. Gateway 2. 20-volt A/C Adapter 3. Ethernet (LAN) cable: Connects your network router with high-speed Internet (not included) to Gateway

All items, including Wind Sensor, are Protected under U.S. Patents: 5,978,738; 6,076,044; & 6,597,990

Wind Sensor also Protected under U.S. Patent: 6,761,065; RE42,057

Remote Monitoring & Alerts Account Activation Card

IMPORTANT!! Do Not Discard Card:

Contains the Activation Key to enable remote monitoring and alerts on www.lacrossealerts.com. Please file activation key for your future records if you do not wish to use the Internet connected features at this time.

Remote Monitoring & Text/E-mail Alerts

- Optional Remote Monitoring & Text/E-mail Alerts are included to remotely monitor your home & backyard weather on www.lacrossealerts.com from your smartphone, tablet or computer.*
- Set & receive custom e-mail & text alerts:*
  - Outdoor temperature & humidity
  - Wind & rain
  - Barometric pressure
  - Indoor temperature & humidity
- High-speed Internet access, network router & Internet-enabled device with web browser required (not included)
- E-mail account and/or SMS text ability for remote monitoring & alerts required (not included)

OPTIONAL FEATURES

iT+ 915MHz INSTANT TRANSMISSION®

INSTANT TRANSMISSION is the state-of-the-art new wireless transmission technology, exclusively designed and developed by La Crosse Technology®. INSTANT TRANSMISSION offers you an immediate update of all the outdoor data measured from the transmitters; follow the climatic variations in real-time!

FEATURES

WEATHER STATION WS-2816U-IT

1. (OPTION 1) Stand-alone weather station with wireless backyard weather sensors. Included Gateway Set and Activation Card is not required.
   Wireless weather station information and manual are available at: www.lacrossetechnology.com/2816

2. (OPTION 2) Internet-connected weather station with remote monitoring and alerts uses the included Gateway Set and Activation Card to enable the included Remote Monitoring & Text/E-mail Alerts from www.lacrossealerts.com
3. Remote Monitoring & Text/E-mail Alerts are included to remotely monitor your home & backyard weather on www.lacrossealerts.com using your smartphone, tablet or computer.*
4. Set & receive custom e-mail & text alerts for:*
   - Outdoor temperature & humidity
   - Wind & rain
   - Barometric pressure
   - Indoor temperature & humidity
5. High-speed Internet access, network router & Internet-enabled device with web browser required (not included)
6. E-mail account and/or SMS text ability for remote monitoring & alerts required (not included)

- Connect the gateway to your router (not included) with the LAN cable, for wireless connection to the weather station.
  Note: See the included Activation Card for the activation key to enable remote monitoring and alerts.*
  There is no app. or software to install.
  All remote monitoring is done on www.lacrossealerts.com with an account that you create if you wish to use these added features.*

Weather station without a computer

- 12/24 hr. time & calendar with date, month & year
- Manual time setting
- Forecast with tendency based on barometric pressure: sunny, partly cloudy & stormy
- Indoor temperature with min/max time & date: 41°F to 104°F (5°C to 40°C)
- Outdoor temperature with min/max time & date: -40°F to 139.8°F (-40°C to 59.9°C)
- In/out relative humidity with min/max time & date: 3% to 99% RH
- Wind chill: down to -40°F (-40°C)
- Relative air pressure with 24hr. / 72hr. history graph (inHg / hPa): Preset range 27.10 to 31.90 inHg
- Wind speed with min/max time & date: 0 to 111 mph (km/h, m/s, knots & Beaufort scale)
- Wind direction with compass (16 points / 22.5 degrees)
- Wind gust with max time & date
- Rainfall for last hour, 24hr., week, month & total: 0 to 393.7 inches (0 to 9999.9 mm)
- Weather alarms for temperature, humidity, wind gust/direction, pressure, 24hr. rain & storm warning (Weather Station)
- LCD contrast setting for easy viewing
- Wall hanging or free standing

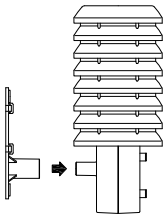
The Professional Weather Station can be used as a stand-alone system. No software is required to connect the outdoor sensors to the display.
Wireless Weather Station Information & Manuals: www.lacrossetechnology.com/support.

Weather station with a computer and Internet connection (optional)

- Internet time/date sync available when using gateway and Internet connection

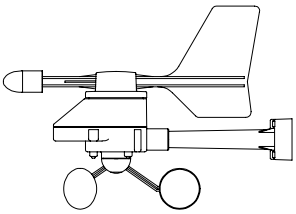
Follow the instructions on www.lacrossealerts.com to set up the gateway and register the display. All website connections are browser-based. Condensed system requirements: Windows Internet Browser: IE8 or later, Chrome 12 or later, Firefox 12 or later; or Mac OS X 10.6 (or later): Safari 5 or later.

WIRELESS THERMO-HYGRO SENSOR (TX59UN-1-IT)



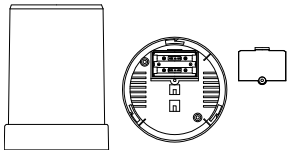
- Monitors backyard temperature and humidity
- Transmission of temperature and humidity data
- 200 ft. wireless range (free of obstructions) to weather station
- 2 "C" Alkaline batteries (included)

WIRELESS SOLAR POWERED WIND SENSOR (TX63U-IT)



- Monitors backyard wind speed, direction and gust
- 100% solar-powered (built-in power cell, no batteries necessary)
- High-efficiency solar panels maintain operation in every season
- 200 Ft. wireless range (free of obstructions) to thermo-hygro sensor

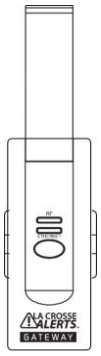
WIRELESS SELF EMPTYING RAIN SENSOR (TX58UN-IT)



- Monitors backyard rainfall
- 200 ft. wireless range (free of obstructions) to thermo-hygro sensor
- 2 "AA" Alkaline batteries (included)

OPTIONAL GATEWAY FOR REMOTE MONITORING

- 200 ft. wireless range (free of obstructions) to weather station
- 20-volt A/C power cord
- Ethernet cable
- Includes Gateway, AC adapter & LAN cable
- Internet access, network router and web browser (not included)



Included Remote Monitoring & Text / Email Alerts (Optional)
Remotely monitor home & backyard weather from your smartphone, tablet or computer:*

- Outdoor temperature & humidity
- Wind& rain
- Barometric pressure
- Indoor temperature & humidity
- Set & receive weather alerts via e-mail & text message.*

*High speed Internet access, network router, & web browser (not included) required. Text messaging may require vendor service fees per message (consult the terms of your device's message plan).
Monitoring & Alerts Activation with Online Instructions: www.lacrossealerts.com

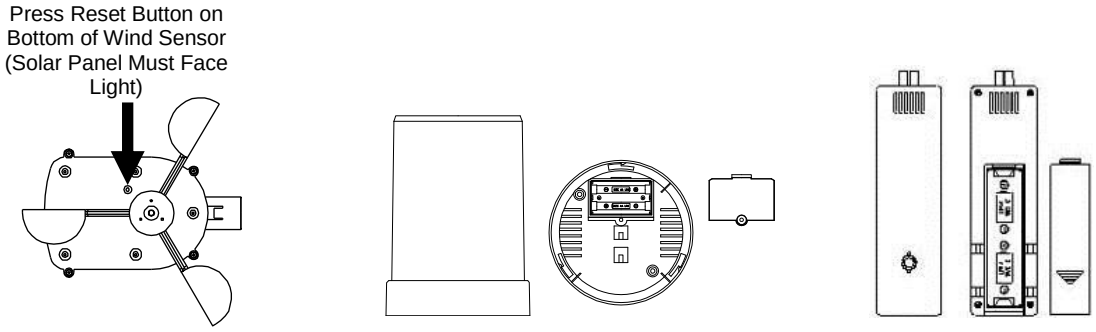
SETUP INSTRUCTIONS STEP-BY-STEP

IMPORTANT: Make sure to observe the correct polarity when inserting batteries. The "+" markings on the batteries must line up with the diagrams inside the battery compartments. Inserting the batteries incorrectly may result in permanent damage to the units. During the initial setup process, place the wireless weather station and the outdoor sensors on a surface with 5-10 feet between each sensor and the weather station. Only use Alkaline batteries, rechargeable batteries may not work.

STEP 1: Complete initial setup on a table with all components within 10 feet of each other.

STEP 2:

- It is important to allow sufficient light to reach the solar panel while activating the wind sensor. Make sure the lights are on in the setup room and the solar panel is facing a 60W light bulb or brighter.
- Ensure the solar panel is not covered, and then remove the black protective foil on the solar panel. Remove the tape covering the reset hole.
- Use the provided plastic reset rod to gently press the reset button once in the hole on the bottom of the sensor.



STEP 3: Insert two "AA" size batteries into rain sensor with correct polarity.

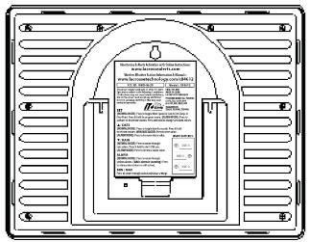
STEP 4:

- Insert two "C" size batteries into the thermo-hygro sensor with the correct polarity.

Note: Allow all sensors to run for two minutes before inserting batteries in the weather station.

STEP 5:

- Insert three "C" size batteries into the wireless weather station with the correct polarity.



Note: Every time the wireless weather station receives data from the sensors, the wireless icons will blink once and then return to solid if the last transmission was successful. A wind speed or rainfall amount that reads "0" does not mean reception failure. It means that there was no wind or rain at the time of the last measurement. The thermo-hygro sensor syncs with the wind and rain sensors and sends all outdoor sensor data to the weather station. The thermo-hygro sensor tries for 4 minutes to sync to the wind sensor and then 4 minutes for the rain sensor. If not successful within 4 minutes, the thermo-hygro sensor will stop looking for the other sensors.

- Wait 10 minutes for reception from all sensors before setting time and date or mounting sensors outside.

STEP 6: Set Time and Date. See **"Program Menu"** below.

Setup Troubleshooting: If the sensor data fails to display for any of the outdoor sensors within 10 minutes ("- - -"are displayed), remove the batteries from all units for 1 minute and start the Setup procedure again at Step 1.

FUNCTION BUTTONS

SET BUTTON

- Hold for 3 seconds to enter the SET mode, where the following can be changed: LCD contrast, Manual time setting, 12/24 hour time display, Date setting, °F/°C temperature unit, Wind speed unit, Rainfall unit, Pressure unit, Relative pressure reference setting, Weather tendency threshold setting, Storm warning threshold setting, Storm Alarm On/ Off setting, Wind direction display type and Factory reset

- Press to toggle between the display of Mode 1 or Mode 2:
  - **Mode 1:** "Wind speed + 24 hr. pressure history graph"
  - **Mode 2:** "Gust + 72 hr. pressure history graph"

- In the weather alarm setting mode, press to switch the weather alarm On/Off
- In the weather alarm setting mode, hold to adjust the weather alarm value
- Stop the weather alarm when ringing

▲/DATE BUTTON

- Press to toggle between the display of seconds or date in the time display
- Press to increase the level of different settings in SET mode
- Hold to re-learn the thermo-hygro sensor synchronization
- Press to reset the MIN/MAX record when in MIN/MAX display mode
- Stop the weather alarm when ringing

▼/RAIN BUTTON

- Press to switch the rainfall display mode: Total, 1h, 24h, week, month
- Press to decrease the level of different settings in SET mode
- Hold to synchronize the display with the gateway
- Stop the weather alarm when ringing

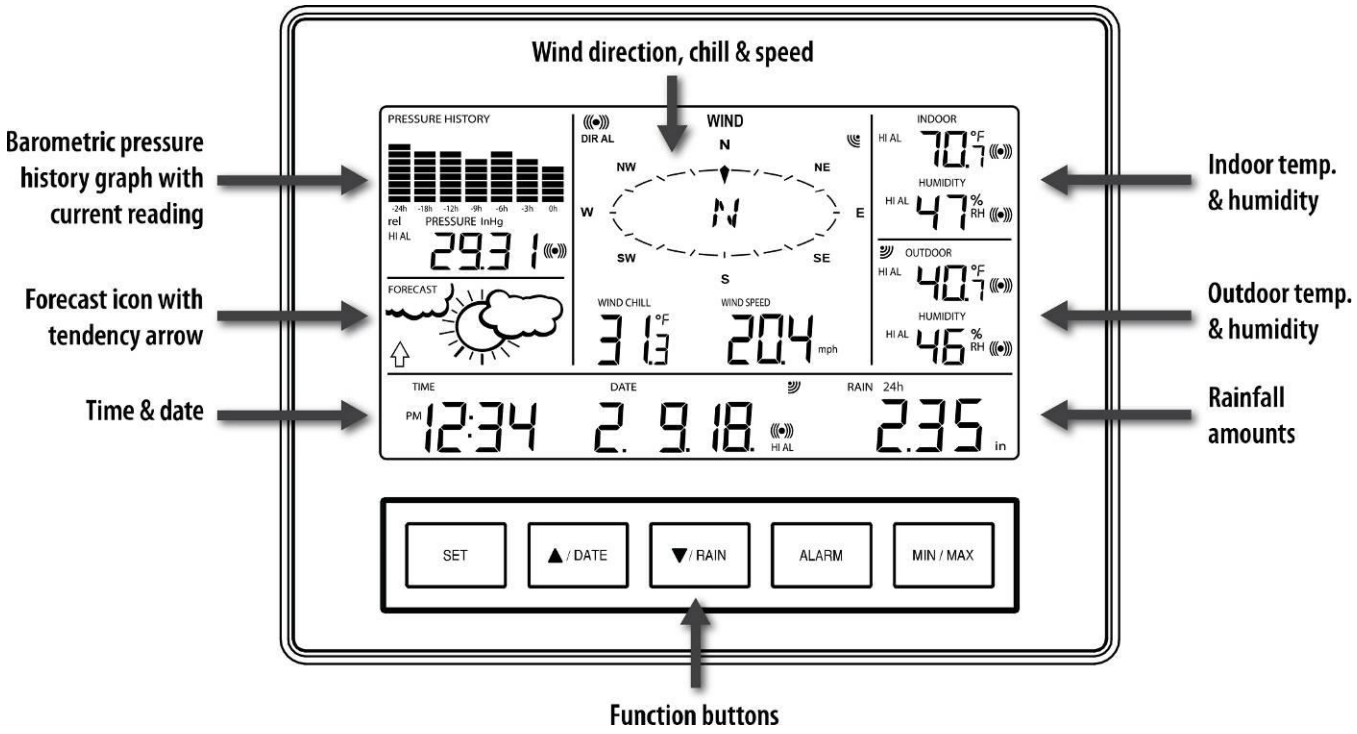
ALARM BUTTON

- Press to enter the time alarm and weather alarm setting mode
- Confirm particular alarm setting
- Press to exit the manual setting mode
- Stop the alarm when the time alarm or weather alarm rings
- Press to exit MIN/MAX record display mode
- Stop the weather alarm when ringing

MIN/MAX BUTTON

- Press to display minimum and maximum records of various weather data
- Stop the weather alarm when ringing

LCD SCREEN



When the signal from an outdoor transmitter is successfully received by the Weather Station, the corresponding icon will be switched on. (If not successful, the icon will not be shown on the LCD). The user can see whether the last reception was successful (icon is on) or not (icon is off). Blinking of the icon shows that a reception is in process.

PROGRAM MENU

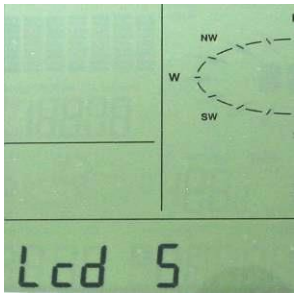
Press and hold the SET button for 3 seconds to enter the SET mode.

Note: The display will automatically return to Mode 1 display in 30 seconds if a button is not pressed.

While in SET mode, press the SET button to advance to the next SET mode item:

LCD contrast setting
Manual time setting
12/24 hour time display
Date setting
°F/°C temperature unit setting
Wind speed unit
Rainfall unit setting
Air pressure unit setting
Relative pressure reference value setting
Weather tendency threshold value
Storm warning threshold value
Alarm On / Off setting
Wind direction display type
Factory Reset or Internet Connection Reset

LCD CONTRAST SET

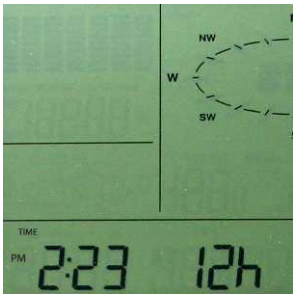


The LCD contrast can be set within 8 levels; from "Lcd 1" to "Lcd 8" (default setting is "Lcd 5"):

1. Press and hold the SET button for 3 seconds; the contrast level digit will flash.
2. Press the ▲/DATE button or ▼/RAIN button to adjust the level of contrast.
3. Press the SET button to confirm and to enter the **MANUAL TIME SET.**

MANUAL TIME SET

The time will be updated automatically with the time from the Internet when the display is synchronized with the gateway. The time can be set manually by following the steps below.



1. The hour digit will flash.
2. Press the ▲/DATE button or ▼/RAIN button to set the hour.
3. Press the SET button to switch to the minutes. The minute digit will flash.
4. Press the ▲/DATE button or ▼/RAIN button to set the minute.
5. Press the SET button to confirm and to enter the **12/24-HOUR TIME DISPLAY.**

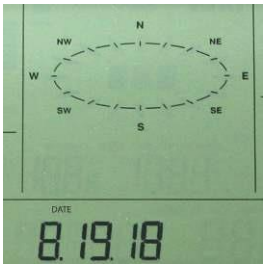
12/24 HOUR TIME DISPLAY

The time can be set as 12-hour or 24-hour format. To change the time display:

1. The "12h" or "24h" digits will flash.
2. Press the ▲/DATE button or ▼/RAIN button to toggle the value.
3. Press the SET button to confirm and to enter the **DATE SET.**

DATE SET

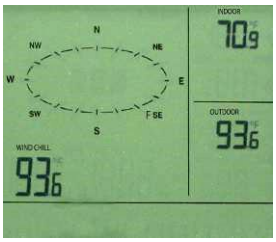
The default date is 1.1. of the year 2013. The date will be updated automatically with the date from the Internet when the display is synchronized with the gateway. The date can also be set manually by following the steps below.



1. The year digit will flash. Press the ▲/DATE button or ▼/RAIN button to set the year. The range runs from "00" (2000) to "99" (2099).
2. Press the SET button to confirm the year and enter the month setting. The month digit will flash.
3. Press the ▲/DATE button or ▼/RAIN button to set the month.
4. Press the SET button to confirm the month and enter the date setting mode. The date digit will flash.
5. Press the ▲/DATE button or ▼/RAIN button to set the date.
6. Press the SET button to confirm and to enter the **°F/°C TEMPERATURE UNIT.**

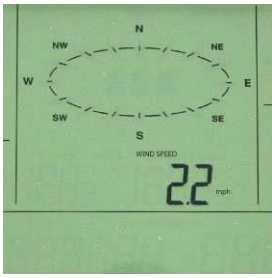
°F/°C TEMPERATURE UNIT

The temperature can be displayed in °F or °C (Default °F).



1. The temperature unit will flash.
2. Press the ▲/DATE button or ▼/RAIN button to toggle between “°F” or “°C”.
3. Press the SET button to confirm and to enter the **WIND SPEED UNIT.**

WIND SPEED UNIT



The wind speed unit can be set to read in mph (miles per hour), km/h (kilometers per hour), bft (Beaufort), knots or m/s (meters per second). The default unit is mph.

1. Press the ▲/DATE button or ▼/RAIN button to toggle between the unit “mph”, “km/h”, "bft", "knots" or “m/s”
2. Press the SET button to confirm and to enter the **RAINFALL UNIT.**

RAINFALL UNIT

The rainfall unit can be set to read in inch or mm. The default unit is inch.

1. Press the ▲/DATE button or ▼/RAIN button to toggle between the unit "inch" or "mm"
2. Press the SET button to confirm and to enter the **RELATIVE AIR PRESSURE UNIT.**

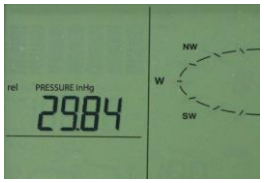
RELATIVE AIR PRESSURE UNIT

The relative air pressure can be set to read in inHg (inches of mercury) or hPa (hectopascal). The default unit is inHg.

1. Press the ▲/DATE button or ▼/RAIN button to toggle between the unit "inHg" or "hPa"
2. Press the SET button to confirm and to enter the **RELATIVE PRESSURE REFERENCE VALUE SET.**

RELATIVE PRESSURE REFERENCE VALUE

Note: For an exact measurement, it is necessary to adjust the barometer to the local relative air pressure (related to elevation above sea level). Ask for the current air pressure of the home area (local weather service, the World Wide Web, calibrated instruments in public buildings, airport). The default reference pressure value is 29.91 inHg.



The relative air pressure can be manually set to another value within the range of 27.17 to 31.90 inHg (920 to 1080 hPa) for a better reference.

1. The current relative pressure value will flash.
2. Press the ▲/DATE button or ▼/RAIN button to increase or decrease the value. Continually holding the button will allow the value to increase faster.
3. Press the SET button to confirm and enter the **WEATHER TENDENCY SENSITIVITY.**

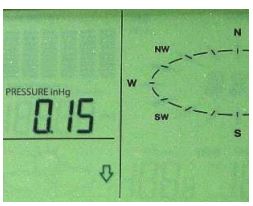
WEATHER TENDENCY SENSITIVITY

The sensitivity of the weather forecast icons to changes in air pressure can be set manually. Smaller values result in a more sensitive forecast. The switching sensitivity value can be set to .06, .09 or .12 inHg (2, 3 or 4 hPa). Select lower values (.06) for high humidity areas like the coastline. Select high numbers (.12) for dry areas like the desert. The default value is 0.09 inHg.

1. The sensitivity value will flash.
2. Press the ▲/DATE or ▼/RAIN to select the value.
3. Press the SET button to confirm and to enter the **STORM WARNING SENSITIVITY.**

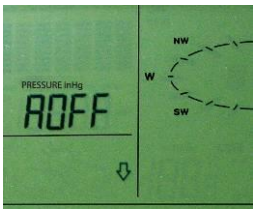
STORM WARNING SENSITIVITY

A storm warning is displayed by flashing of the **down** weather tendency arrow when the air pressure decreases a specified amount over six hours. The sensitivity value for the storm warning display can be set between .09 inHg to .27 inHg (3hPa to 9hPa). The default value is 0.15 inHg.



1. The sensitivity value will flash.
2. Press the ▲/DATE button or ▼/RAIN button to select the value.
3. Press the SET button to confirm and to enter the **STORM ALARM ON/OFF SET.**

STORM ALARM ON/ OFF SET



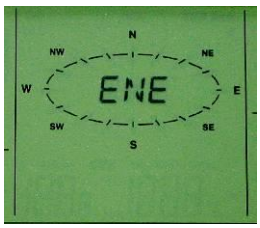
The storm warning display (flashing downward weather tendency arrow) can be accompanied by a ring of the alarm. Switch the acoustic storm warning alarm On (AON) or Off (AOFF) (Default OFF).

1. The digit "AOFF" will flash.
2. Press the ▲/DATE button or ▼/RAIN button to switch the alarm On or Off. ("AOFF" = Off; "AON" = On)
3. Press the SET button to confirm and to enter the **WIND DIRECTION DISPLAY TYPE.**

WIND DIRECTION DISPLAY TYPE

The wind direction can be displayed using either compass directions or degree measurements. **N** is equivalent to 0° on the compass. The default setting is compass directions.

1. The wind direction will flash.
2. Press the ▲/DATE button or ▼/RAIN button to toggle from compass directions to degree measurements.



3. The next steps in SET mode is the factory reset, so unless you wish to reset the display to factory defaults, simply wait until the SET mode times out and returns to the Mode 1 display.

4. If you wish to perform a FACTORY RESET, press the SET button to confirm and to enter the **FACTORY RESET PROCEDURE.** SEE WARNINGS in the FACTORY RESET section.

FACTORY RESET PROCEDURES

WARNING: Internet Connection Reset Only

The factory reset procedure has an option to clear the **remote monitoring registration information only** from the weather station.

1. "**rES oFF**" will flash.
2. Use the ▲/DATE button or ▼/RAIN button to select "**rES Lo**".
3. Press the SET button to confirm and the weather station will return to the normal weather display mode.
4. Follow the instructions at www.lacrossealerts.com to reregister the weather station online.

WARNING: Avoid Factory Reset

Performing a factory reset will erase all MIN/MAX values and weather data stored in the display's internal memory and return the weather station's settings back to the factory defaults.

If you do not wish to reset the display to factory defaults, either:

- Press the MIN/MAX button or the ALARM button to exit SET mode, or
- Simply wait 30 seconds until the SET mode times out and returns to the Mode 1 display.

WARNING: Complete Factory Reset

A **factory reset** will erase the Internet connection and the connection between the display and the thermo-hygro sensor and require the all sensor connections to be re-established.

5. "**rES oFF**" will flash.
6. Use the ▲/DATE button or ▼/RAIN button to select "**rES ALL**".

7. Press the SET button to confirm and a countdown timer will begin counting down from "127" When the timer displays "**dOnE**", you must remove the batteries from the display for 10 minutes. While the batteries are out of the display, also remove the batteries from the thermo-hygro sensor and rain sensor.
8. After waiting for 10 minutes, insert the batteries into the thermo-hygro sensor, and rain sensor making sure to align the "+" symbol on the batteries with the markings on the battery cover and inside the battery compartment.
9. Within 2 minutes of inserting the batteries into the sensors, insert the batteries into the display, making sure to align the "+" symbol on the batteries with the markings inside the battery compartment.
10. Wait 5 minutes for the outdoor weather data to display. If any of the outdoor data displays "--" after waiting for 5 minutes, follow the "**Setup Instructions**" near the beginning of this manual or in the Quick Setup Manual included with the product.

TO EXIT THE MANUAL SETTING MODE

To exit the manual setting at any time, either:

- Press the MIN/MAX button or the ALARM button to exit SET mode or
- Simply wait 30 seconds until the SET mode times out and returns to the Mode 1 display.

WEATHER ALARM OPERATIONS FOR THE WEATHER STATION DISPLAY

The Weather alarms can be set when certain weather conditions are met. For example, you can set the thresholds for the outdoor temperature to +104°F (high) and 14°F (low), while enabling the high alarm and disabling the low alarm (i.e. temperatures <14°F won't trigger alarm, but temperatures >+104°F will).

- When the value meets the condition for high alarm or low alarm, the alarm will ring for 2 minutes and the value will blink, along with the corresponding icon ("HI AL"/ "LO AL").
- Press any button to stop a ringing alarm.
- The high and low alarms can be switched On/Off independently, according to the need.
- If at any time during the alarm setting process you would like to exit alarm setting mode, press the MIN/MAX button or wait for about 30 seconds and the display will return to normal display mode automatically.
- Press the ALARM button to enter ALARM mode. Subsequent presses of the ALARM button will advance to the next weather alarm section.

Note: Monitoring & Alerts Activation with Online Instructions: www.lacrossealerts.com. Remote Monitoring and Alerts Activation Card has instructions and the needed activation key to enable this feature.

THE FOLLOWING WEATHER ALARMS CAN BE SET IN ALARM MODE

- High and Low pressure alarms
- High and Low indoor temperature alarms
- High and Low indoor humidity alarms
- High and Low outdoor temperature alarms
- High and Low outdoor humidity alarms
- High wind gust alarm
- Wind direction alarm
- Rainfall amount in 24 hour period alarm

Note: The **storm alarm** is set in the program menu.

DEFAULT WEATHER ALARM VALUE

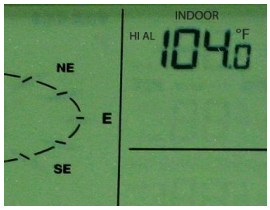
Pressure	Low	28.35 inHg
	High	30.71 inHg
Temperature (In or Out)	Low	32°F
	High	104°F

Wind Gust	High	62.0mph
Wind Direction	North	
Rainfall in 24 hours	High	1.96 in
Relative Humidity (In or Out)	Low High	45% 70%

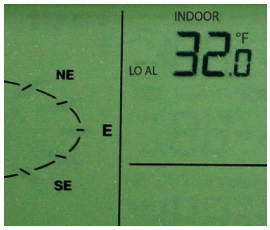
PRESSURE ALARMS

1. In the normal display mode, press the ALARM button once. The high-pressure alarm display will show.
2. Press and hold the SET button for about 2 seconds. The pressure digit will flash.
3. Press the ▲/DATE button or ▼/RAIN button to set the high-pressure alarm value. Hold the arrow button in to change the value faster.
4. Press the ALARM button to confirm the setting. The digit will stop flashing.
5. Press the SET button to switch the alarm on or off. The (•) icon indicates the alarm is switched on.
6. Press the ALARM button once. The Low Pressure alarm display will show.
7. Press and hold the SET button for about 2 seconds. The pressure digit will flash.
8. Press the ▲/DATE button or ▼/RAIN button to set the low-pressure alarm value. Hold the arrow button in to change the value faster.
9. Press the ALARM button to confirm the setting. The digit will stop flashing.
10. Press the SET button to switch the alarm on or off. The (•) icon indicates the alarm is switched on.
11. Press the ALARM button to move to the **indoor temperature alarms.**

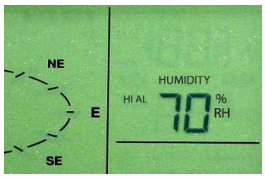
INDOOR TEMPERATURE ALARMS:



1. The high indoor temperature alarm display will show.
2. Press and hold the SET button for about 2 seconds. The temperature digit will flash.
3. Press the ▲/DATE button or ▼/RAIN button to set the high indoor temperature alarm value. Hold the button in to change the value faster.
4. Press the ALARM button to confirm the setting. The digit will stop flashing.
5. Press the SET button to switch the alarm on or off. The (•) icon indicates that the alarm is switched on.
6. Press the ALARM button once. The low outdoor temperature alarm display will show.
7. Press and hold the SET button for about 2 seconds. The temperature digit will flash.
8. Press the ▲/DATE button or ▼/RAIN button to set the low indoor temp alarm value. Hold the arrow button in to change the value faster.
9. Press the ALARM button to confirm the setting.
10. Press the SET button to switch the alarm on or off. The (•) icon indicates the alarm is on.
11. Press the ALARM button to move to the **indoor humidity alarms.**

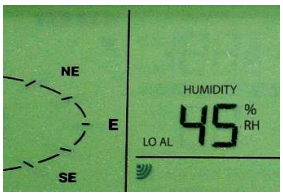


INDOOR HUMIDITY ALARMS:

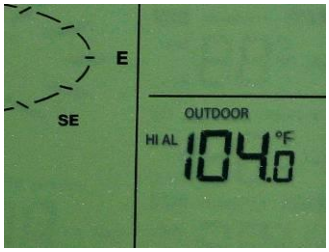


1. The high indoor humidity alarm display will show.
2. Press and hold the SET button for about 2 seconds. The humidity digit will flash.
3. Press the ▲/DATE button or ▼/RAIN button to set the high indoor humidity alarm value.
4. Press the ALARM button to confirm the setting. The digit will stop flashing.

5. Press the SET button to switch the alarm on or off. The (•)) icon indicates the alarm is switched on.
6. Press the ALARM button once. The low indoor humidity alarm display will show.
7. Press and hold the SET button for about 2 seconds. The humidity digit will flash.
8. Press the ▲/DATE button or ▼/RAIN button to set the low indoor humidity alarm value.
9. Press the ALARM button to confirm the setting. The digit will stop flashing.
10. Press the SET button to switch the alarm on or off. The (•)) icon indicates the alarm is on.
11. Press the ALARM button to move to the **outdoor temperature alarms.**



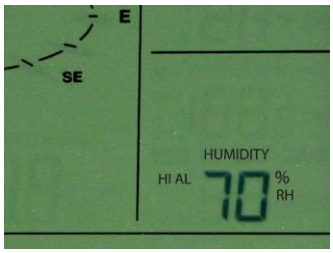
OUTDOOR TEMPERATURE ALARMS:

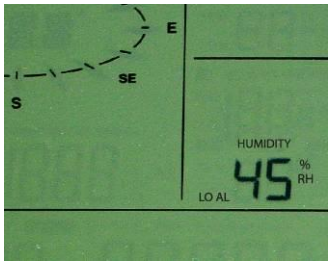


1. The high outdoor temperature alarm display will show.
2. Press and hold the SET button for about 2 seconds. The temperature digit will flash.
3. Press the ▲/DATE button or ▼/RAIN button to set the high outdoor temp alarm value. Hold the button in to change the value faster.
4. Press the ALARM button to confirm the setting. The digit will stop flashing.
5. Press the SET button to switch the alarm on or off. The (•)) icon indicates that the alarm is switched on.
6. Press the ALARM button once. The low outdoor temperature alarm display will show.
7. Press and hold the SET button for about 2 seconds. The temperature digit will flash.
8. Press the ▲/DATE button or ▼/RAIN button to set the low outdoor temp alarm value. Hold the arrow button in to change the value faster.
9. Press the ALARM button to confirm the setting. The digit will flash.
10. Press the SET button to switch the alarm on or off. The (•)) icon indicates the alarm is switched on.
11. Press the ALARM button to move to the **outdoor humidity alarms.**

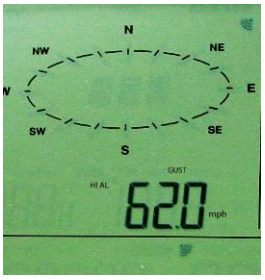
OUTDOOR HUMIDITY ALARMS:

1. The high outdoor humidity alarm display will show.
2. Press and hold the SET button for about 2 seconds. The humidity digit will flash.
3. Press the ▲/DATE button or ▼/RAIN button to set the high outdoor humidity alarm value.
4. Press the ALARM button to confirm the setting. The digit will stop flashing.
5. Press the SET button to switch the alarm on or off. The (•)) icon indicates the alarm is switched on.
6. Press the ALARM button once. The low outdoor humidity alarm display will show.
7. Press and hold the SET button for about 2 seconds. The humidity digit will flash.
8. Press the ▲/DATE button or ▼/RAIN button to set the low outdoor humidity alarm value.
9. Press the ALARM button to confirm the setting. The digit will stop flashing.
10. Press the SET button to switch the alarm on or off. The (•)) icon indicates the alarm is switched on.
11. Press the ALARM button to move to the **wind gust alarm.**





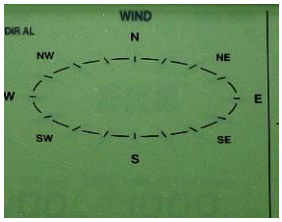
WIND GUST ALARM



1. The wind gust alarm display will show.
2. Press and hold the SET button for about 2 seconds. The wind gust digit will flash.
3. Press the ▲/DATE button or ▼/RAIN button to set the wind gust alarm value.
4. Press the ALARM button to confirm the setting. The digit will stop flashing.
5. Press the SET button to switch on or off the alarm. The (•)) icon indicates the alarm is switched on.
6. Press the ALARM button to move to the **wind direction alarm.**

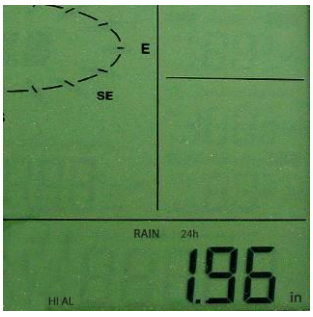
WIND DIRECTION ALARM

Multiple wind direction alarms can be set simultaneously if desired.



1. The wind direction alarm display will show.
2. Press and hold the SET button for about 2 seconds. The wind direction arrow on the outside of the compass circle will flash with the corresponding compass direction or degrees reading displayed in the center of the compass.
3. Press the ▲/DATE button or ▼/RAIN button to move the wind direction alarm pointer.
4. Press the SET button to set a wind direction alarm value. A pointer icon will appear inside of the compass circle to indicate an alarm setting for that wind direction.
5. To remove an alarm setting for a wind direction, press the SET button again to remove the selected wind direction alarm. The arrow icon inside the compass circle will disappear.
6. If more than one wind direction is desired as an alarm setting, Press the ▲/DATE button or ▼/RAIN button to move the wind direction alarm pointer to the next desired setting.
7. Press the SET button to confirm the next wind direction value. A pointer icon will appear inside of the compass circle to indicate an alarm setting for that wind direction. You can set as many wind direction alarms as you desire.
8. Press the ALARM button to confirm the setting. The digit will stop flashing.
9. Press the SET button to switch on or off the alarm. The (•)) icon indicates the alarm is switched on.
10. Press the ALARM button to move to the **24-hour rainfall alarm.**

24 HOUR RAINFALL ALARM



1. The 24-hour rainfall alarm display will show.
2. Press and hold the SET button for about 2 seconds. The 24-hour rainfall digit will flash.
3. Press the ▲/DATE button or ▼/RAIN button to set the 24-hour rainfall alarm value.
4. Press the ALARM button to confirm the setting. The digit will stop flashing.
5. Press the SET button to switch on or off the alarm. The (•)) icon indicates the alarm is switched on.
6. Press the ALARM button to exit the alarm setting mode.

HYSTERESIS

To compensate for fluctuation of the weather data (which may cause the weather alarm to ring constantly if the measured reading is close to the alarm level), a hysteresis function has been implemented for each weather alarm.

Weather data	Hysteresis
Temperature	1.8°F
Humidity	3% RH
Pressure	0.029 inHg
Wind speed	6.2 mph

For example, if the high temperature alarm is set to 77°F and the temperature reaches 77°F, the alarm will be activated. If the temperature then drops to 76.8°F (a change of less than 1.8°F) and then increases to 77°F again, the data will blink, but no alarm will be activated.
The temperature would have to drop below 75.2°F (with a pre-set hysteresis of 1.8°F) so that the alarm can be produced again. Hysteresis values for the various weather data types are given in the table.

Note: The temperature or humidity data will keep flashing even after the weather alarm has been switched off by a button press. The flashing value indicates that the current weather condition is out of the pre-set weather alarm limit(s).

DISPLAY MODES

MODE 1

Press and release the SET button to toggle between Mode 1 and Mode 2 display:
- Pressure history graph displays **24 hour** history
- Wind **speed** displayed in the wind section

MODE 2

Press and release the SET button to toggle between Mode 1 and Mode 2 display:
- Pressure history graph displays **72 hour** history
- Wind **gust** displayed in the wind section

DATE OR SECONDS DISPLAY

- Press the ▲/DATE button to toggle between display of the date or seconds
- Hold the ▲/DATE button until the station beeps to resync with sensors

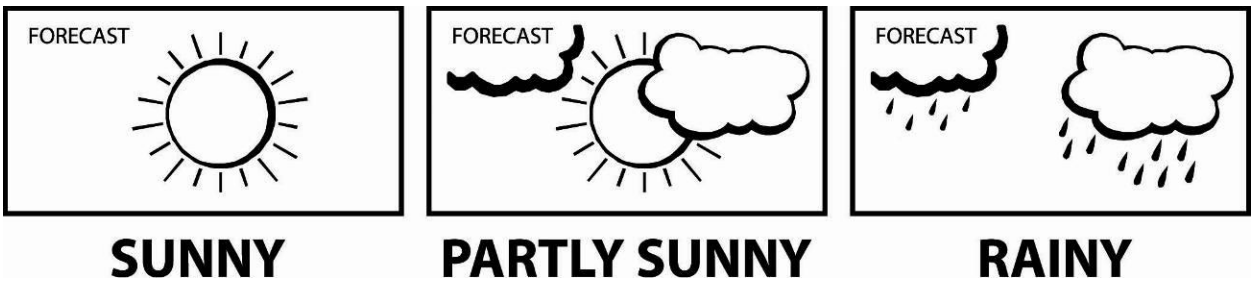
RAINFALL DISPLAY

Press and release the ▼/RAIN button to view:
- 1-hour
- 24-hour
- Past Week
- Past Month
- Total Rainfall

Hold the ▼/RAIN button until the station beeps to resync with the gateway.

WEATHER FORECAST AND TENDENCY

WEATHER FORECASTING ICONS



For every sudden or significant change in the air pressure, the weather icons will update accordingly to represent the change in weather.

Every time a new average pressure value has been obtained (once per minute); this value is compared with an internal reference value. If the difference between these values is bigger than the selected weather tendency sensitivity, the weather-icon changes, either for worse or for better. In this case, the current pressure value becomes the new weather tendency reference.

If the icons do not change, either the air pressure has not changed or the change has been too small for the Weather Station to register. You may adjust the "sensitivity" of the pressure change check in the setting mode–see **WEATHER TENDENCY SENSITIVITY** in the manual settings above.

The displayed icon forecasts the weather in terms of getting better or worse and not necessarily sunny or rainy as each icon indicates. For example, if the current weather is cloudy and the rainy icon is displayed, it does not mean that the product is faulty because it is not raining. It simply means that the air pressure has dropped and the weather is expected to get worse but not necessarily rainy.

Note: After set up, readings for weather forecasts should be disregarded for the next 48-60 hours. This will allow sufficient time for the Weather station to collect air pressure data at a constant altitude and therefore result in a more accurate forecast.

Common to weather forecasting, absolute accuracy cannot be guaranteed. The weather forecasting feature is estimated to have an accuracy level of about 75% due to the varying areas the Weather Station has been designed for use. 75% accuracy is comparable to the best meteorological forecasting rate. In areas that experience sudden changes in weather (for example, from sunny to rain), the Weather Station will be more accurate compared to use in areas where the weather is stable most of the time (for example, mostly sunny).

If the Weather Station is moved to another location significantly higher or lower than its initial standing point (for example, from the ground floor to the upper floors of a house), discard the weather forecast for the next 48-60 hours. The Weather Station may mistake the new location as being a possible change in air-pressure when really it is due to the slight change of altitude.

WEATHER TENDENCY INDICATOR

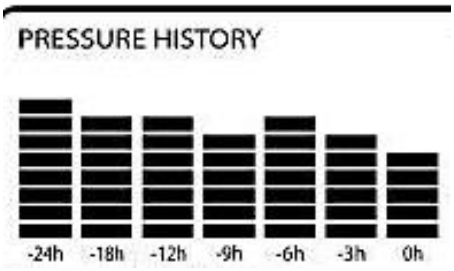
Working together with the weather icons is the weather tendency indicators (**arrows located on the left and right sides** of the weather icons). When the indicator points upwards, it means that the air-pressure is increasing and the weather is expected to improve, but when the indicator points downwards, the air-pressure is dropping and the weather is expected to become worse.

For example, if the indicator is pointing downwards together with cloud and sun icons, then the last noticeable change in the weather was when it was sunny (the sun icon only). Therefore, the next change in the weather will be cloud with rain icons since the indicator is pointing downwards.

Note: Once the weather tendency indicator has registered a change in air pressure, either the upward or downward tendency arrow will be displayed until the tendency changes again.

AIR PRESSURE HISTORY GRAPH

The LCD shows the relative air pressure value and the air pressure history on a bar graph.
Press the SET button to toggle between Mode1 and Mode2 of the display.



- **Mode 1:** The bar graph displays the air pressure history of the past 24 hours in seven steps. The horizontal axis represents the last 24 hours of air pressure recording (-24, -18, -12, -8, -6, -3 and 0 hour).
- **Mode 2:** The bar graph displays the air pressure history of the past 72 hours in seven steps. The horizontal axis represents the last 72 hours of air pressure recording (-72, -48, -36, -24, -12, -6 and 0 hour).

The vertical bars are plotted at each of the seven steps and give the trend over the recorded period. The 0 hour vertical bar will always display at the midline height to indicate the current air pressure. The varying height of bars in other columns on the graph indicates a relative change in air pressure up or down from the 0 hour.

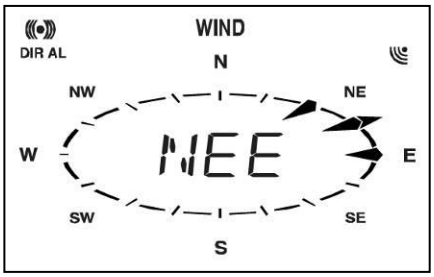
New pressure measurements are compared to previously recorded pressure measurements. The pressure change is expressed by the difference between the current ("0h") and the past readings in divisions of ±0.06 inHg or ±2 hPa. If the bars are rising from left to right, this indicates that the weather is getting better due to an increase in air pressure. If the bars are falling from left to right, this indicates that the weather is expected to get worse due to a drop in air pressure.

At every full hour, the current air pressure is used as a basis for the display of a new graph bar. The existing graph is then moved one column to the left.

Note: For accurate barometric pressure trend, the weather station should operate at the same altitude. Should the unit be moved (for instance, from the ground to the second floor of the house), the readings for the next 48-60 hours should be discarded.

Note: The bar graph will scroll right to left regularly to prevent LCD burnout.

WIND DIRECTION AND WIND SPEED MEASUREMENT



- The longest pointer on the outer circle of the compass indicates the current wind direction.
- The last 6 wind directions may be displayed with shorter pointers on the inner circle.
- The wind direction (abbreviation or degrees) is displayed in center of compass.

Press the SET button to toggle between Mode1 and Mode 2 of the display.

Mode 1 displays the following wind data:

- Wind direction
- Wind chill in °F or °C
- Wind **speed** in mph, km/h, bft, knots or m/s

Mode 2 displays the following wind data:

- Wind direction
- Wind chill in °F or °C
- Wind **gust** in mph, km/h, bft, knots or m/s

RAINFALL MEASUREMENT

The 1hour, 24-hour, week, month or total rainfall measurement is displayed in the unit of inch or mm.

For all measurements, it is important time and date are set correctly on your display.

- 1-HOUR RAIN: The 1-hour rain reflects rain that has fallen from current time and back 1-hour. It updates every four minutes (15 measurements). The hour is not a fixed clock time measurement. It is literally an ongoing "last 60 minutes" timer.

- 24-HOUR RAIN: The 24-hour rain reflects the rain that has fallen from current time and back 24-hours. This is not a midnight to midnight measurement. The day is not a fixed clock time measurement. It is literally an ongoing "last 24 hours" timer.

- WEEKLY RAIN: The amount of rainfall of the previous week. Week: Rain total for the week is reset every 7 days. Week begins 1 day before the day the batteries are first inserted into the weather station. For example, if the batteries are inserted on a Thursday, the start of the weekly totals will be Wednesday of each week.

- MONTHLY RAIN: Monthly rain reflects the **previous** month's rain and will update 12AM the first day of the month.

- TOTAL RAIN: Total rain will remain until you manually reset this value. Total rain reflects the rain from time of display set-up until you manually reset the total rain.

Note: RESET RAIN: Press and release the MIN/MAX button until the display shows the Total Rainfall value. Press the ▲/DATE button. The total rainfall amount will be reset to 0, and the time updated to current time.

MIN/MAX WEATHER DATA

The weather station will automatically record the maximum and minimum value of the various weather data with time and date of recording. Press and release the MIN/MAX button to view the following stored maximum and minimum weather data:

1. MIN/MAX indoor temperature with the date and time of recording
2. MIN/MAX indoor humidity with the date and time of recording
3. MIN/MAX outdoor temperature with the date and time of recording
4. MIN/MAX outdoor humidity with the date and time of recording
5. MAX wind gust with the date and time of recording
6. Total rainfall with the date the rainfall total was last reset.

Note: If the rainfall total has not yet been reset, "---. --. ---- will be displayed for the date.

RESET THE MIN/MAX WEATHER DATA

1. Press MIN/MAX button to show the desired weather data.
2. Press ▲/DATE button. The stored value will be reset to the current value and current time.

Note: Each MIN or MAX weather data value will need to be reset independently.

RESET TOTAL RAINFALL AMOUNT

The total rainfall measurement is displayed in the unit of mm or inch. It shows the total rainfall accumulated since last reset of the total rainfall amount.

In either Mode 1 or Mode 2 display, press and release the MIN/MAX button until the display shows the Total Rainfall value.

Press the ▲/DATE button to reset the Total Rainfall reading on the display. The total rainfall amount will be reset to 0, and the time is updated to current time.

Note: Until the first rainfall total reset is performed, the time and date of the total rainfall are displayed as "- - -.--. ----". After the rainfall total is reset, the rainfall total display will indicate the date and time of the last rainfall total reset.

COMMON TERMS

RELATIVE HUMIDITY

Relative humidity is how close the air is to saturation (how much moisture the air can hold). On a warm day, more water can evaporate as there is more thermal energy to do the work of evaporation. Generally the higher the temperature, the lower the RH as more evaporation takes place.

WIND CHILL-EQUIVALENT TEMPERATURE

A fictional temperature that is felt by human beings under certain conditions instead of the measured temperature which can be taken into account during low temperatures. For La Crosse Technology® products, these conditions are a Temperature below 40°F and a wind velocity above 5 mph.

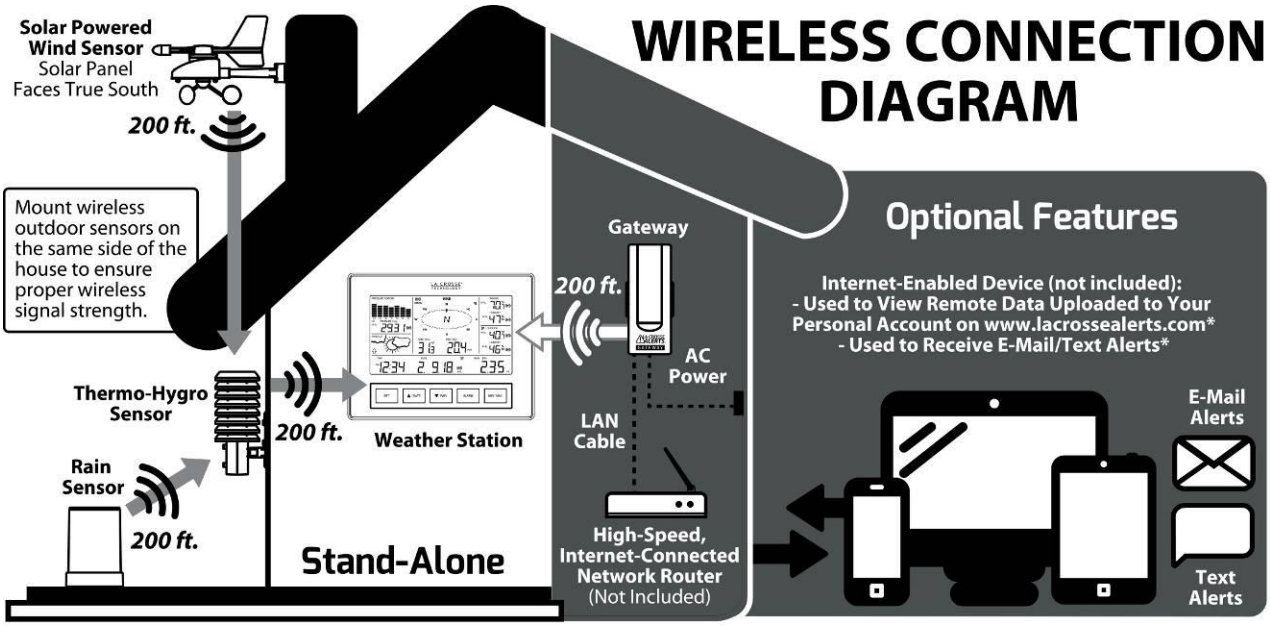
WIND GUST

A wind gust is a sudden, brief increase in the speed of the wind (less than 20 seconds) followed by a lull. This is different from a sustained wind.

MOUNTING AND PLACEMENT OF SENSORS AND WEATHER STATION

IMPORTANT: Ensure that all of the sensor data can be received at the intended mounting locations before you drill mounting holes. The outdoor sensors have a wireless range of **200 feet.** Keep in mind that the **200 foot** range equates to an open-air scenario with no obstructions. Each obstruction (roof, walls, floors, ceilings, etc.) will reduce the range.

- The thermo-hygro sensor measures outdoor temperature & humidity and collects the data from the wind and the rain sensors and sends all outdoor weather data to the wireless weather station, so the thermo-hygro sensor must be within the **200 foot** wireless range of the wireless weather station. This allows the wind and rain sensors to be placed relative to the thermo-hygro sensor rather than the wireless weather station. See the **Wireless Connection Diagram** below.
- The wind and rain sensors must be mounted within the **200 foot** wireless range of the thermo-hygro sensor and on the same side of the house. In addition, 915 MHz sensors transmit better at a minimum mount height of 6 feet.
- The wireless weather station must be within the **200 foot** wireless range of the gateway to upload weather data to the Internet.



If the sensor wireless reception icons drop from the weather station as you move them into their intended locations, the sensors may be too far from the wireless weather station. Try moving the weather station or the sensors closer and wait a few minutes to see if the wireless reception icons display again. If the wireless reception icons are still not displayed after re-positioning the sensors or the wireless weather station, hold the ▲/DATE button for 2 seconds to re-synchronize the weather station with the sensors.

WIND SENSOR

The wind sensor must be installed **with the front of the sensor (the solar panel) facing true south**, or the reported wind direction will not be accurate.

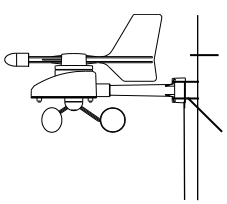
- Mount within the **200 foot** wireless range of the thermo-hygro sensor and on the same side of the house. The roof may or may not be an ideal mounting location.
- Secure the main unit to the shaft of the mast holder. Use the right-angle adaptor to mount the wind sensor on a horizontal mast or surface.
- Fasten the wind sensor to a suitable mast using the U-bolt, washers and nuts included.

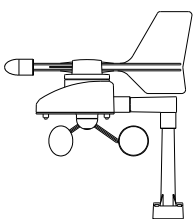
Note: Mount the wind sensor onto a mast, at a minimum height of 6 feet, so the wind can reach the sensor unobstructed from all directions for an accurate reading. The ideal mast is between 0.62" and 1.3" in diameter. The wind sensor DOES NOT have replaceable batteries; it consumes solar power and charges the internal battery pack automatically.

Note: Do not open the wind sensor. This will void the warranty.

Mounting Masts: A suitable mast must be made entirely of a non-conductive material (e.g. treated wood, electrical grade metal or electrical grade PVC).

The issue is the static electricity transmission capability of the entire pipe, which can lead to erratic wind readings, or loss of signal. Coating or painting a pipe does not resolve the static or RF interference risks, as the inside of the material can conduct. The color gray is also not a guarantee of electrical grade protection. Any non-electrical grade mast may conduct, which may result in data spikes, RF interference, etc.

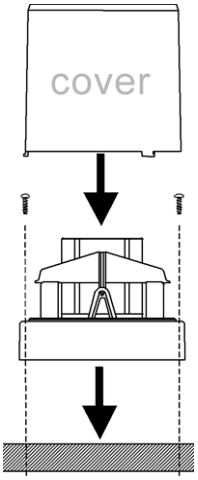




RAIN SENSOR

Mount the rain sensor on a level surface in an open area within the **200 foot** wireless range of the thermo-hygro sensor and on the same side of the house.

- Mount the rain sensor at least 6 feet off the ground and level for optimum wireless transmission.
- The rain sensor should be accessible to allow for periodic cleaning of debris or insects.
- To avoid frequent build-up of debris, do not mount the rain gauge too close to the trees or plants.
- Remove the funnel portion (cover) of the rain gauge by twisting it firmly counter clockwise.
- Hold the base of the rain gauge flat against the mounting surface then use a level to make sure the rain gauge (as it rests on the mounting surface) is horizontally level.
- Use a pencil to trace the inside of the mounting holes on the base of the rain gauge to mark the screw locations.
- Drill a hole in the center of each marked location.
- Hold the rain gauge against the mounting surface so the holes on the base are aligned with screw holes, and then thread washer head screws (not included) into each hole and use a screwdriver to gently snug the screws.



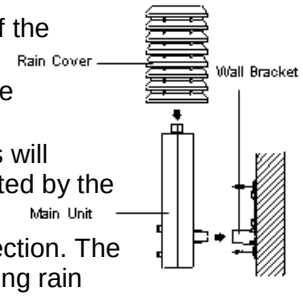
Note: Do not over-tighten the mounting screws.

- The Rain Gauge is self-emptying and can be left out all year or stored in the winter. If stored for the winter, remove the batteries to avoid leakage.
- Be aware of other wireless rain gauges in the area that may cause interference.

THERMO-HYGRO SENSOR

The thermo-hygro sensor is "weather resistant", but not "waterproof".

- To ensure an extended life for the sensor, mount it in a semi-covered place out of the elements at a minimum height of 6 feet.
- An ideal location for the thermo-hygro sensor is under the eaves on the North side of the house to avoid the effects of sunlight.
- Mount the sensor 18" down from the eaves to ensure optimum performance. This will assure the temperature of the air coming out of the attic will not affect data collected by the sensor.
- The cap on the sensor is for proper airflow for humidity reading and not rain protection. The Thermohygro sensor can withstand rain, snow and temperature extremes. Standing rain and snow may soak into the sensor and cause failure.
- To wall mount the thermo-hygro sensor, fix the wall holder onto the desired wall using the included screws, plug the sensor firmly into the wall holder and replace the rain cover if it is not already in place.



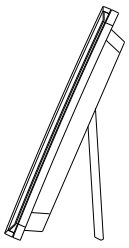
Note: After mounting the units, if the weather data is not received, press and hold the ▲/DATE button for 2 seconds to synchronize the weather station to the sensors.

WEATHER STATION

The Professional Weather Station is free standing with the base stand or can be wall mounted.

Wall mount:

- Fix a screw (not supplied) into the desired wall, leaving the head extended out the by about 0.2 inches (5mm).
- Hang the weather station onto the screw. Ensure that it locks into place before releasing the professional weather station.



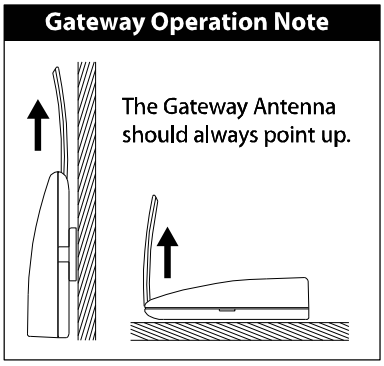
Free standing: Simply pull out the stand to the back of the weather station and place on a flat surface.

Position:

- Choose a location 6 feet or more from electronics such as cordless phones, gaming systems, televisions, microwaves, routers, baby monitors, etc., which can prevent signal reception.
- Place within range of the outdoor transmitters. The maximum transmitting range in open air is 200 feet (60 meters).
- Be aware of electrical wires and plumbing within a wall. This will interfere with signal reception.
- Obstacles such as walls, windows, stucco, concrete, and large metal objects can reduce the range.
- Position the weather station to receive outdoor data from the thermo-hygro sensor and send data to the gateway.

GATEWAY

- Position the gateway within range (200 feet open air) of the weather station.
- The gateway should be installed indoors in an easy-to-reach location.
- Registration requires that you press the gray button on the gateway.
- It can be mounted securely to the wall with the included mounting plate and drywall anchors.



Note: If you require a longer LAN cable to mount the gateway in a desired location, any standard Category 5 network cable will work, but a crossover cable may not work. Crossover cables designed to connect two computers without networking hardware may not work with your gateway.

Note: Network cables usually have length limitations. The same length limitations will apply that apply to computers on your home network.

STAND-ALONE WEATHER STATION OR INTERNET CONNECTED WEATHER STATION WITH REMOTE MONITORING & ALERTS

Use the weather station as:

1. **(OPTION 1) Stand-alone weather station** with wireless backyard weather sensors. Included Gateway Set and Activation Card is not required.
   Wireless weather station information and manual are available at: www.lacrossetechnology.com
2. **(OPTION 2) Internet-connected weather station with remote monitoring and alerts** uses the included Gateway Set and Activation Card to enable the included Remote Monitoring & Text/E-mail Alerts from www.lacrossealerts.com
   - Remote Monitoring & Text/E-mail Alerts are included to remotely monitor your home & backyard weather on www.lacrossealerts.com using your smartphone, tablet or computer.*
   - Set & receive custom e-mail & text alerts for:*
     - Outdoor temperature & humidity
     - Wind & rain+
     - Barometric pressure
     - Indoor temperature & humidity
   - High-speed Internet access, network router & Internet-enabled device with web browser required (not included)
   - E-mail account and/or SMS text ability for remote monitoring & alerts required (not included)
   - Connect the gateway to your router (not included) with the LAN cable, for wireless connection to the weather station.

Note: See the included **Activation Card** for the activation key to enable remote monitoring and alerts.* **There is no app or software to install.**
All remote monitoring is done on www.lacrossealerts.com with an account that you create if you wish to use these added features.*

SPECIFICATIONS

INDOOR TEMPERATURE

41°F to 104°F (5°C to 40°C) (“OF.L” displayed if outside this range)

INDOOR HUMIDITY

3% to 99% (“- -” displayed if < 1%, "99" displayed if ≥ 99%)

OUTDOOR TEMPERATURE

-40°F to 139.8°F (-40°C to 59.9°C) (“OF.L” displayed if outside this range)

OUTDOOR HUMIDITY

3% to 99% (“- -” displayed if < 1%, "99" displayed if ≥ 99%)

WIND SPEED/ GUST

0 to 111.8 mph with resolution of 0.22 mph
0 to 180 km/h with resolution of 0.36 km/h
0 to 12 bft
0 to 97.1 knots with resolution of 0.19 knots
0 to 50 m/s with resolution of 0.1 m/s
(Displays "OF.L" when > 111.62 mph; 49.9 m/s)

WIND CHILL

Down to -40°F (displays "OF.L" if outside this)

RAINFALL

0" to 393.7" (0 to 9999 mm) (displays "OF.L" when > 393.7")

OUTDOOR DATA RECEPTION INTERVAL

Temperature and humidity data every 13 seconds sent to the display
Wind data every 17 seconds sent to the TH sensor
Rain data every 19 seconds sent to the TH sensor

AIR PRESSURE

Relative pressure pre-set range: 27.17 to 31.90 inHg (919 to 1080 hPa)
Measured every 15 seconds

TRANSMISSION RANGE

Rain to Thermo-hygro:	200 feet in open space
Wind to Thermo-hygro:	200 feet in open space
Thermo-hygro to Weather Station:	200 feet in open space
Weather Station to Gateway:	200 feet in open space

POWER CONSUMPTION

WEATHER CENTER

3 x C size batteries (IEC LR14, 1.5V)
Approximately 24 months (Alkaline batteries recommended)

THERMO-HYGRO TRANSMITTER

2 x C size batteries (IEC LR14, 1.5V)
Approximately 24 months (Alkaline batteries recommended)

RAIN SENSOR

2 x AA size batteries (IEC LR6, 1.5V)
Approximately 24 months (Alkaline batteries recommended)

WIND SENSOR

100% solar-powered (built-in power cell, no batteries necessary)
High-efficiency solar panels maintain operation in every season

GATEWAY

20-volt A/C power cord

DIMENSIONS

WEATHER CENTER

8.665” L x 1.594” W x 6.795” H (220.1 x 40.5 x 172.6 mm)

THERMO-HYGRO TRANSMITTER

3.13" L x 3.54" W x 7.45" H (79.4 x 89.8 x 189.3 mm)

RAIN SENSOR

5.2" DIA. x 7.2" H (131.6 DIA. x 182.7 mm)

WIND SENSOR

9.84" L x 5.74" W x 7.57" H (250 x 145.9 x 192.3 mm) without mounting base

GATEWAY

1.574” L x 0.787” W x 4.055” H (40 x 20 x 103 mm)

CARE AND MAINTENANCE

- **Do not mix old and new batteries**
- **Do not mix Alkaline, Standard, Lithium or Rechargeable Batteries**
- Always purchase the correct size and grade of battery most suitable for intended use.
- Replace all batteries of a set at the same time.
- Clean the battery contacts and also those of the device prior to battery installation.
- Ensure the batteries are installed with correct polarity (+and -).
- Remove batteries from equipment which is not to be used for an extended period of time.
- Remove expired batteries promptly.
- When cleaning the display and casings, use a soft damp cloth only. Do not use solvents or scouring agents as they may mark the LCD and casings.
- Do not submerge the unit in water.
- Special care shall be taken when handling a damaged LCD display. The liquid crystals can be harmful to user's health.
- Do not make any repair attempts to the unit. Return them to their original point of purchase for repair by a qualified engineer. Opening and tampering with the unit may invalidate their guarantee.
- Never touch the exposed electronic circuit of the device. There is a danger of electric shock should it become exposed.
- Do not expose the display to extreme and sudden temperature changes, this may lead to rapid changes in forecasts and readings and thereby reduce their accuracy.

ALERTS AND MONITORING DISCLAIMER

* Disclaimers: La Crosse Technology, LTD. ("La Crosse") provides various alert and monitoring services to aid users. (1) Service providers may charge users for alert services. Standard messaging and data rates apply and will be billed to the customer's wireless account. Customers may be unable to receive text messaging or data service in some areas due to unavailability of service. (2) La Crosse shall not be liable for accuracy, usefulness or availability of data transmitted via the service. Users are solely responsible for damages to persons or property by service use.

LIABILITY DISCLAIMER

- The electrical and electronic wastes contain hazardous substances. Disposal of electronic waste in wild country and/or in unauthorized grounds strongly damages the environment.
- Please contact the local or/and regional authorities to retrieve the addresses of legal dumping grounds with selective collection.
- All electronic instruments must from now on be recycled. User shall take an active part in the reuse, recycling and recovery of the electrical and electronic waste.
- The unrestricted disposal of electronic waste may do harm on public health and the quality of environment.
- As stated on the gift box and labeled on the product, reading the "User manual" is highly recommended for the benefit of the user. This product should not be thrown in general rubbish collection points.
- The manufacturer and supplier cannot accept any responsibility for any incorrect readings and any consequences that occur should an inaccurate reading take place.
- This product is designed for use in the home only as indication of the temperature.
- This product is not to be used for medical purposes or for public information.
- The specifications of this product may change without prior notice.
- This product is not a toy. Keep out of the reach of children.
- No part of this manual may be reproduced without written authorization of the manufacturer.

WARRANTY INFORMATION

La Crosse Technology, Ltd. provides a 1-year limited time warranty (from date of purchase) on this product relating to manufacturing defects in materials & workmanship.

View full warranty details online at:
www.lacrossetechnology.com/warranty_info.pdf

For warranty work, technical support or other information contact:
La Crosse Technology, Ltd
2830 South 26th St.
La Crosse, WI 54601

Contact Support:
608-782-1610

Online Product Support:
www.lacrossetechnology.com/support

Product Registration:
www.lacrossetechnology.com/support/register

Protected under U.S. Patents:
5,978,738 | 6,076,044 | RE43903 | 6,761,065

FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device must not be co-located or operating in conjunction with any other antenna or transmitter.
Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Caution!
The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

This booklet may contain errors or misprints. The information it contains is regularly checked and corrections are included in subsequent editions. We disclaim any responsibility for any technical error or printing error, or their consequences.